# Dan Inouye U.S. SENATOR FROM HAWAII



# SENATE APPROVES \$484 MILLION FOR DEFENSE-RELATED PROJECTS IN HAWAII DURING FISCAL YEAR 2006

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#### FOR IMMEDIATE RELEASE

WASHINGTON — The U.S. Senate today passed the Fiscal Year 2006 Department of Defense Appropriations Bill, which includes approximately \$484 million for defense-related initiatives in Hawaii, U.S. Senator Daniel K. Inouye announced. The vote was 97 to 0.

Coupled with the Senate's appropriation of nearly \$367 million for military construction projects in Hawaii that is now under consideration by a House-Senate conference committee, Hawaii is poised to receive approximately \$851 million in military-related spending, excluding day-to-day operations and payroll, during Fiscal Year 2006.

"The funds for the Hawaii-related projects are crucial for supporting key aspects of our national defense, such as the Pacific Command, the Pacific Missile Range Facility at Barking Sands, Kauai, and the C-17 aircraft, which will provide transport for the Hawaii-based Stryker Brigade," said Senator Inouye, the Ranking Member of the Senate Defense Appropriations Subcommittee. "The bill also funds locally based high-tech research, development, and evaluation to ensure that the U.S. military remains the world's best, and provide medical and other essential support for our men and women in uniform and their dependents."

Senator Inouye will serve as a member of the House-Senate conference committee that will resolve differences in the House and Senate versions of the defense funding legislation. The final version crafted by the conference committee will be presented

to the House and Senate for final approval, and then sent to the President to sign into law.

Some highlights of the Defense Appropriations Bill are:

U.S. Army, Pacific Command (USARPAC) C4I \$28.95 million (Funding shared by units throughout the Pacific.)

These funds would be used to support USARPAC's command, control, communications, computer, and intelligence system, known as C4I. This system is crucial to USARPAC's ability to manage information.

#### Compatible Use Buffer Program

\$20 million

The Committee provides an additional \$20 million to continue this program. This initiative supports cooperative agreements with states and local communities, and other interested stakeholders to acquire key conservation easements around military bases and ranges. These additional funds will help the proposal that Hawaii has already submitted for areas that include the Pohakuloa Training Area and Oahu.

Maui High Performance Computing Center Technology Upgrade \$15 million Funds would be used to support operations and technology upgrades at MHPCC. The MHPCC is one of the world's largest supercomputer installations, and it supports a wide range of military activities.

Pacific Missile Range Facility (PMRF) – Upgrades and Equipment \$15 million PMRF is the world's largest instrumented, multi-environment range capable of supporting surface, subsurface, air, and space operations. It has an instrumented underwater range of 1,000 square miles, and controlled airspace of more than 42,000 square miles, making PMRF one of the world's best facilities for supporting operations that vary from small, single-unit exercises to large, multiple-unit battle group scenarios.

Other Hawaii-related projects in the defense appropriations measure include:

# OAHU/STATEWIDE

#### C-17 Maintenance Training Systems

\$28 million

This funding will support both Hawaii and Alaska's C-17 aircraft, which are planned to begin arriving at Hickam Air Force Base this winter. The systems provide training programs and equipment for technicians in order to maintain their certification skills.

C-17 Beddown \$10.7 million

These funds would be used for equipment, furnishings, and facility modifications to accommodate the operations and maintenance of C-17 squadrons.

#### Man Overboard Identification (MOBI) System

\$9.1 million

The MOBI system is an on-going project for the Navy that equips ships to immediately send an alert when a sailor is overboard and provides the precise location of where the individual is in the water. The installation of these systems takes place at Pearl Harbor.

#### Agile Coalition Environment (ACE)

\$8 million

Today's military coalitions are constantly changing, so a centrally managed network that is reconfigurable and secure ensures that only the intended audience receives all transmitted data. ACE allows coalition members to communicate securely during scheduled deployments and during times of crisis.

Electro-Optic Passive Anti-Submarine Warfare (EPAS)

\$8 million

Funding would be used to continue research on EPAS technology to provide realtime surveillance and detection of submarines and smaller objects in relatively shallow waters. This technology, mounted on the bottom of aircraft, is an important part of the military's anti-submarine warfare program.

#### Standoff Sensor for Radionuclide Identification

\$8 million

This research initiative, which includes the University of Hawaii as a partner, would begin to develop sensors capable of remotely sensing nuclear, chemical, and biological specimens or evidence of their existence.

#### Bow Lifting Body Ship Research

\$7 million

The Navy is examining advanced hull form technologies to incorporate into its next generation of ships, which need to be more efficient, stable, faster, and less costly. The appropriation would be used to support technology to achieve these goals.

Pacific Rim IT Infrastructure Improvement Program

\$7 million

This funding will support improvements to the Hawaii and Alaska National Guard information technology infrastructures.

Center of Excellence for Research in Ocean Studies (CEROS) \$7 million

The appropriation would be used to foster technology development and commercial use of ocean and marine research through CEROS, a Big Island-based project that

seeks to advance innovative concepts and new approaches to technology for the U.S. Department of Defense.

Theater Undersea Warfare Initiative (TUSW)

\$7 million

This funding is an on-going effort of a Kailua-based project to improve submarine detection capabilities. The project is supported by the Maui High Performance Computing Center (MHPCC).

Corrosion Prevention and Control Program

Army Marine Corps \$2 million

\$4 million

This program seeks to limit the corrosion of equipment and vehicles that operate under harsh environmental conditions.

High Frequency Acoustic Signal Processor System

\$6 million

This technology has the potential for advancing the Navy's ability to detect faint acoustic signals both on land and in the water.

Defense Dependents Education Support and School Repairs

\$5.5 million

The appropriation would be used to support school construction and additional resources to aid Hawaii public schools with large numbers of military dependents. Of the total, \$500,000 will be targeted to assist schools enrolling children of military personnel moving to Hawaii to serve in the Hawaii-based Stryker Brigade.

Small Business Pilot Program

to Re-Engineer Vendor Pay Process

\$5 million

This pilot project has the potential to reduce the cost and improve the performance of current financial management systems in the Department of Defense.

Hawaii Energy and Environmental Technology (HEET)

\$4.5 million

HEET is an ongoing University of Hawaii program that supports cutting edge research and testing of fuel cells at its facility in downtown Honolulu.

Army Conservation and Ecosystem Management

\$4 million

The appropriation supports environmental mitigation and remediation, and \$2 million of the total will be used to focus on the Pohakuloa Training Area and its anticipated expansion.

Autonomous Unmanned Surface Vessel

\$4 million

Funding is provided for testing the autonomous unmanned surface vessel under development for use as a cost-effective, high endurance, intelligence, surveillance, and reconnaissance system.

# Communications Upgrade at MCBH

\$4 million

This initiative improves the quality of life for military personnel residing on Marine Corps Base Hawaii (MCBH) at Kaneohe by providing telecommunication services (dial tone, high-speed Internet, and cable television) to families residing in military housing.

#### Hawaii Technology Development Venture

\$4 million

Funding for this program supports a regional center for the commercialization of defense and homeland security technologies, and provides an opportunity for small companies in Hawaii to develop advanced technologies for national defense.

Hickam Air Force Base Alternative Fuel Vehicles Program \$4 million

The funding would continue Hickam's participation to test alternative-fuel vehicles, including those powered by fuel cells or electricity.

Consolidated Undersea Situational Awareness System (CUSAS) \$3.4 million CUSAS is designed to provide superior knowledge to naval forces through the use of advanced, interactive software that creates a comprehensive operational picture and real-time tactical information for the warfighter.

#### Hawaii National Guard Counterdrug Program

\$3.1 million

The funds for this ongoing program would be used to enhance drug interdiction activities at Hawaii's ports of entry, support anti-drug programs targeting youths, and eradicate marijuana.

#### Advanced Fusion Processor

\$3 million

This funding would continue the development of a real-time, dedicated processor for linking data from multiple sensors, and would provide the Navy with a more accurate targeting and intelligence-gathering capability.

Hyperspectral System for Day/Night Reconnaissance \$3 million
Hyperspectral imaging sensors provide the capability to detect and identify targets
not discernible with conventional sensors. The funds would allow the Navy to
continue its efforts to extend hyperspectral technology advancements to improve the
Navy's warfare target detection, discrimination, and identification.

Information Sharing for Intelligence, Surveillance, Reconnaissance, Targeting and Engagement (ISRTE) of Mobile Targets

\$3 million

This funding will develop a robust airborne and ground architecture to support aircraft ISRTE operations, and will help address airborne network bandwidth limitations.

#### Brown Tree Snake Control

\$2 million

The funding would be used to continue the military's efforts to prevent Brown Tree Snakes from leaving Guam, where they are prevalent and responsible for destroying much of Guam's unique ecosystem, on military transports flying to Hawaii. The program is key to keeping Brown Tree Snakes out of Hawaii.

Military Rapid Response Command Information System \$2 million
This initiative would develop a testbed for the integration of naval aviation with
advanced command and control software and data analysis tools.

Pacific Rim Environmental Degradation of Materials Research \$2 million

Funds would be used for ongoing research at the University of Hawaii to find ways
to limit corrosion on Army equipment under different climatic conditions.

Pacific-Theater Data Fusion Testbed (PDFT)

\$2 million

PDFT will provide the Missile Defense Agency and the U.S. Navy's sea-based missile defense program with advanced capabilities to allow positive identification of threat ballistic missiles.

Sentient Adaptive Systems Technology

\$2 million

Funds would continue a partnership between Boeing and the University of Hawaii to improve the military's ability to maintain aircraft.

Small Business Development and Transition

\$2 million

This initiative supports the establishment or expansion of small businesses in addressing direct military needs and those of adjacent communities engaged in agriculture and resource management.

Wastewater Treatment Upgrade

\$2 million

These funds will support the installation, repair, and maintenance of an adjacent off-base wastewater/treatment facility and infrastructure critical to base operations and the public health and safety of community residents in the vicinity of Whitmore Village and the new, enhanced regional security operations center.

NavAir Systems Command Data Conversion Effort

\$1.5 million

This project will convert technical manual data from its current paper format into

an electronic manual format, which the Navy will use to aid its fleet maintainers.

#### Articulated Stable Ocean Platform

\$1 million

This program would leverage previous lifting-body research and development to develop, build, and demonstrate a stable, rapidly deployable pilot floating platform.

# Biological Raman and Optical Imaging Program

\$1 million

Research will be conducted at the University of Hawaii that has the potential to impact the real-time detection of biomolecules for medical applications, including cancer detection and biodefense applications.

# Command Responder

\$1 million

Command Responder builds on the National Guard's existing Eagle Vision program, which accesses and downloads commercially available satellite products. Command Responder will augment that capability with advanced software to select relevant and actionable data for the warfighter.

Hyperspectral Imager for the Coastal Ocean (HICO)

\$1 million

HICO is a hyperspectral sensor being designed and built by the University of Hawaii, and will be deployed to the International Space Station to provide advanced spectral resolution.

# Intelligent Decision Exploration (INDEX)

\$1 million

INDEX will provide more agile modeling and command and control capabilities, including an advanced ability to search large amounts of data.

Maritime Air-Ground Task Force Situational Awareness

\$1 million

This funding supports the development and field test of a prototype situational awareness and tactical decision support system for a counter-sniper weapon system.

#### Methane Desalination Systems

\$1 million

Together with the University of Hawaii, this new research project will examine new technologies for harvesting methane gas from deep ocean water sources.

Multi-Target-Tracking Optical Sensor Array Technology (MOST) \$1 million MOST technology will benefit test and evaluation of the missile defense system by providing enhanced data on missile intercepts.

#### SEE RESCUE Distress Streamer

\$1 million

The funds would be used to purchase orange polyethylene streamers. The streamers

would be deployed by military personnel lost at sea or in distress, making it easier for them to be located by search and rescue teams.

Semi-Autonomous Underwater Vehicle (SAUVIM) \$1 million Funds would go to the University of Hawaii to continue research on an underwater robotic vehicle for the Navy.

Hawaii Wireless Interoperability Network (HWIN)

\$500,000

These funds will be used to support the Hawaii National Guard initiative to develop an effective communication solution for public responders across all levels of government.

#### **MAUI**

Maui Space Surveillance System (MSSS)

\$25 million

MSSS is a state of the art electro-optical facility that combines operational satellite tracking facilities with research and development activities. It houses the U.S. Department of Defense's largest telescope, the 3.67-meter Advanced Electro Optical System, and several other telescopes.

High Accuracy Network Determination System (HANDS) \$10 million
Funding would continue work on HANDS, which uses relatively low-cost, innovative
telescopes to determine orbital information of satellites. HANDS provides greater
accuracy in tracking space data through a network of telescopes that would allow
the Air Force to better perform its Space Situational Awareness mission.

PanSTARRS \$10 million

The appropriation would be used to develop large aperture telescopes with different sensors. The Maui Space Surveillance System, the University of Hawaii Institute of Astronomy, and the Maui High Performance Computing Center are cooperating on this initiative.

Pacific-Based Joint Information Technology Center \$8 million Funding would be used to create and manage databases, such as the location of military and federal medical supplies worldwide.

Applications of LIDAR to Vehicles with Analysis (ALVA) \$7 million
The capability to perform critical Air Force missions can be significantly enhanced through the application of technology developed under ALVA. Applications include long-range airborne battlefield surveillance.

# Pacific Disaster Center

\$6 million

The Center, in operation since February 1996, is a federal information processing facility that supports emergency management activities in the Pacific Ocean and Indian Ocean regions.

Advanced Radio Frequency Technology Development

\$4 million

Funding would continue this program in Kihei to conduct laser communications and sensors research for the Missile Defense Agency.

# Multi-Frame Blind Deconvolution (MFBD)

\$3 million

The goal of this program is to achieve near real-time analysis using data fusion algorithms and image processing to reduce the size of data to more accurately track and identify objects that are hundreds of kilometers away.

# Multifunctional Daytime Optical System

\$2 million

The Air Force is looking to enhance its optical systems with daylight imaging. This research and development program has the potential to increase the operational capability of the Maui Space Surveillance System by providing a sensor that can operate during daylight hours.

# Computational Proteomics

\$1 million

Computational proteomics is an interdisciplinary field combining chemistry, molecular biology, mathematics, computer sciences, and information technology to analyze the structure and function of proteins. This funding would enable the MHPCC, and the University of Hawaii Medical School to continue a computational proteomics program for research on biomedical defenses.

Porous Silicon

\$1 million

Funding for this program would further the development of a biosensor that can rapidly detect and identify specific chemical and biological agents in the field without having to bring samples to a laboratory.

Unmanned Systems Testbed Project/Pathfinder Demo

\$1 million

This project at the Pacific Missile Range Facility (PMRF) on Kauai and at the MHPCC on Maui focuses on the definition, design, and early implementation of a facility for tests and evaluation, training, and exercises involving unmanned aerial vehicles.

# KAUAI

Digitization of Technical and Operational Manuals

\$20 million

This funding would be shared among the Native American and Native Hawaiian corporations set up to support the Native American Document Conversion Program for the digitization of manuals for the military. The first digitizing center is in Anahola, Kauai, and the second center is in Waimanalo, Oahu.

Common Affordable Radar Processor (CARP)

\$8 million

This program would provide an affordable, high-performance processing capability for Navy radar systems using commercial technology. Development, demonstration, and testing would be done at the Pacific Missile Range Facility (PMRF).

Maritime Synthetic Range

\$7 million

This continuing program simulates targets for tracking and surveillance tests.

Mobile Modular Command Center (M2C2)

\$7 million

M2C2 is a vehicle equipped with radios and communications equipment that allows Marines to communicate while on the move.

Advanced Integrated Radar Electronics and Photonics (AIREP) \$6.5 million
This is a follow-up program to the UHF Electronically Scanned Array radar for the
Navy. The project demonstration is located at the Mountaintop Test Bed on
Makaha Ridge, Kauai, at PMRF.

Network Application Integration Facility (NAIF)

\$6 million

NAIF is a demonstration and development hub for the global Tactical Component Network (TCN) that is being deployed to multiple Defense Department platforms and organizations to improve the military's situational awareness. Funding would support NAIF, and its demonstration of the global TCN concept.

Chitosan Bandage Component

\$4 million

This project would continue the development of a U.S.-made chitosan bandage for the U.S. military.

Force Protection Laboratory

\$4 million

The lab serves as an incubator for force protection and base security technologies.

Kauai Test Facility

\$4 million

The activities of the Kauai Test Facility, operated by Sandia National Laboratories and owned by the U.S. Department of Energy, include launches with realistic trajectories that provide a target for sensors and interceptors that are being tested.

# Makaha Ridge FORCEnet Lab

\$4 million

The funding would be used on Makaha Ridge at PMRF to support a testbed for ground-based exercises for the Navy's Advanced Hawkeye E-2C aircraft.

**Optical Sensors** 

\$4 million

This funding would support PMRF's missile defense activities with sensors that can better collect data from missile launches and intercept tests.

Silicon Thick Film Mirror Coatings

\$3 million

Funds would be used to continue research and manufacturing of hard, corrosionresistant optical coatings for mirrors with space, missile defense, and commercial applications.

Strategic Materials

\$3 million

This is an ongoing project to develop technologies for the manufacture of strategic materials, specifically low-cost, corrosive-resistant ceramics and ceramic matrix composite materials.

Flood Control at PMRF

\$2.5 million

Range Mission Tool

\$2.5 million

These funding initiatives would continue programs to support PMRF, and its ability to monitor and display the ever-increasing volume of data collected during tests and exercises at the range.

Sensor Data Fusion and Communications

\$2.5 million

Hawaii Undersea Vehicle Test and Training Environment \$2 million
The objective of this program is to develop an advanced test and training capability
in the Hawaii area for the Navy's Advanced SEAL Delivery System, a small
submarine used by Navy SEALs, and future undersea vehicles.

Pacific Ballistic Missile Technology Program

\$1.5 million

This program would enhance the development, integration, and demonstration of advanced technologies for ballistic missiles and upgrades to range safety instrumentation.

Maritime Directed Energy Test and Evaluation Center (MDETEC) \$1 million Funding would continue the design and development of MDETEC at PMRF for test and evaluation of high-energy lasers in a maritime environment to meet Navy requirements.

#### HEALTH

Tripler Army Medical Center AKAMAI II, Telemedicine Initiative,

\$25 million

AKAMAI II supports the applied research, development, and deployment of telehealth technology to improve access and the quality of care to military families, federal beneficiaries, and impacted communities. It also strengthens partnerships with important health care providers and institutions, technology companies, the University of Hawaii, and military assets such as the Maui High Performance Computing Center to create a critical mass of cutting edge innovations and capabilities. These funds will be managed by the Telemedicine and Advanced Technology Research Command. The funds would be allocated as follows:

\$15 million with \$3 million provided for each of the following:

- To pursue pre-clinical development of the West Nile and dengue vaccine.
- To continue refinement of the Personal Intelligent Medical Assistant to improve patient care through non-invasive measurement of heart and respiration rates, and to begin development of nanotechnology-based tools to improve vaccine effectiveness and safety.
- To advance the bioengineering of human cornea and other tissues for transplantation to aid in the healing of injured organs, and to develop materials/polymers for novel delivery of therapeutics.
- To support development of functional near-infrared brain sensing to aid aircrew life support and unmanned aerial vehicle control.
- To develop improved clinical information system and information processing to enhance patient safety.

# \$5.5 million to support several community initiatives:

 \$1.3 million to continue graduate education programs that place postgraduate social work and psychology fellows in underserved rural areas.

- \$1 million to continue targeted services utilizing technology innovation to those public schools with large numbers of military dependents with special needs.
- \$1 million to continue development of a cord blood repository at the Hawaii Blood Bank in partnership with Tripler, and to allow for both treatment and research to benefit military and non-federal beneficiaries.
- \$1 million to demonstrate effective preventive chronic disease management care at home for a primarily veteran population with renal disease.
- \$500,000 to develop innovative "Triple Helix" (academic, government, and industry) partnerships in the area of advanced health care technology.
- \$400,000 to explore the use of simulation and advanced training to improve patient safety in rural communities.
- \$300,000 to begin preliminary development work in the areas of neurotrauma and neuro-rehabilitation bringing together medical and engineering professionals to improve recovery and mobility of amputees and those suffering from head trauma.

\$2.5 million to support the John A. Burns School of Medicine in the research areas of tropical medicine and infectious diseases, including avian flu, HIV, AIDS, and SARS, all of which are of pressing concern to both U.S. civilian and military experts, as well as our nation's allies in the Asia-Pacific region.

\$2 million to continue research at the University of Hawaii to develop simulation, biosensors, and imaging systems together with the Maui High Performance Computing Center.

Center for Excellence in Disaster Management and Humanitarian Assistance

\$4.3 million

Through legislation sponsored by Senator Inouye, the Center, also called COE, was established in 1994, and is operated as a partnership involving the U.S. Pacific Command, the Pacific Regional Medical Command, the Centers for Disease Control and Prevention, and the University of Hawaii. Funding provides education, training, and research in civilian-military operations, particularly efforts that

require international disaster management, humanitarian assistance, and interagency coordination.

Pacific Island Health Care Referral

\$4.25 million

This appropriation would continue the Pacific Island Health Care initiative, utilizing telemedicine, and, as needed, transportation and medical care to the medically underserved U.S.-associated Pacific islands. The program provides U.S. military medical personnel with valuable training.

Tripler eICU Remote Critical Care

\$1 million

Funds would continue a Remote Critical Care Command Center established at Tripler that provides around the clock care and monitoring of patients across large geographic regions, and ensures immediate access to qualified medical specialists.

HSDI \$7 million

The program involves the development of equipment for the detection and rapid remote analysis of intestine, lung, and colon cancer.

Vascular Graft Development on Elastin Biomatrices

\$4.8 million

The project is for developing techniques to grow replacement blood and tissue for use after battlefield injuries.